

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Previously Presented): A method for processing a urethane resin, comprising:

adding to a urethane resin a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (COOH), a salt of the carboxyl group, an ester of the carboxyl group and an acid anhydride of the carboxyl group (-CO-O-CO-).

Claim 2 (Previously Presented): The method according to claim 1, wherein the decomposing agent is added in an amount that provides 0.1 to 3 equivalents of the functional group for each equivalent of urethane bond present in the urethane resin.

Claim 3 (Original): The method according to claim 1, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 4 (Previously Presented): The method according to claim 3, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

Claim 5 (Previously Presented): A method for processing a urethane resin, comprising:

adding to a urethane resin a decomposing agent containing an epoxy group,

the decomposing agent being added in an amount that provides 0.1 to 2 equivalents of the epoxy group for each equivalent of urethane bond present in the urethane resin.

Claim 6 (Original): The method according to claim 1, wherein the decomposing agent further contains at least one hydroxyl group.

Claim 7 (Original): The method according to claim 2, wherein the decomposing agent further contains at least one hydroxyl group.

Claim 8 (Original): The method according to claim 5, wherein the decomposing agent further contains at least one hydroxyl group.

Claim 9 (Previously Presented): The method according to claim 1, wherein the urethane resin and the decomposing agent are mixed under pressurized and heated condition.

Claim 10 (Previously Presented): The method according to claim 2, wherein the urethane resin and the decomposing agent are mixed under pressurized and heated condition.

Claim 11 (Previously Presented): The method according to claim 5, wherein the urethane resin and the decomposing agent are mixed under pressurized and heated condition.

Claim 12 (Previously Presented): A decomposed substance of a urethane resin which is produced by

decomposing a urethane resin by

adding to the urethane resin a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (-COOH) and an acid anhydride group of the carboxyl group (-CO-O-CO-).

Claim 13 (Original): The urethane decomposed substance according to claim 12, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 14 (Previously Presented): The urethane decomposed substance according to claim 13, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

Claim 15 (Previously Presented): A method for producing a recycled resin, comprising:

adding to a urethane resin a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (-COOH) and an acid anhydride of the carboxyl group (-CO-O-CO-), to thereby decompose the urethane resin and obtain a decomposed substance, and

reacting the decomposed substance of the urethane resin with a compound that contains at least one functional group selected from the group consisting of an epoxy group and an isocyanate group.

Claim 16 (Original): The method according to claim 15, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 17 (Previously Presented): The method according to claim 16, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

Claim 18 (Currently Amended): A recycled resin, which is produced by adding to a urethane resin ~~either~~ a decomposing agent that contains at least one functional group selected from the group consisting of a carboxyl group (COOH) ~~and a salt of the carboxyl group, an ester of the carboxyl group~~ and an acid anhydride (-CO-O-CO-) of the carboxyl group, ~~or a decomposing agent that contains at least one functional group selected from the group consisting of an isocyanate group (NCO) and an epoxy group,~~ thereby obtaining a decomposed substance, and then reacting the decomposed substance of the urethane resin with a compound that contains at least one functional group selected from the group consisting of an epoxy group and an isocyanate group.

Claim 19 (Original): The recycled resin according to claim 18, wherein the decomposing agent is an anhydride of a polycarboxylic acid.

Claim 20 (Previously Presented): The recycled resin according to claim 19, wherein the decomposing agent is at least one compound selected from the group consisting of phthalic anhydride, methyltetrahydrophthalic anhydride, hexahydrophthalic anhydride, and succinic anhydride.

BASIS FOR THE AMENDMENT

Claim 18 has been amended as supported by Claim 18 as originally filed.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-20 will now be active in this application.

Serial No. 10/870,905 and the present invention; and Serial No. 10/873,237 and the present invention were commonly owned at the time the present invention was made.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Kirsten A. Grueneberg, Ph.D.

Registration No.: 47,297

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
NFO:KAG: